

What is claimed is:

- 1 1. A digital still camera comprising a main solid image element
2 as a full frame type solid image element, and a sub solid image
3 element as a solid image element which has pixels fewer than
4 that of said main solid image element and can operate at a higher
5 frame rate than said main solid image element.
- 1 2. The digital still camera according to claim 1, comprising
2 a digital image signal process circuit in which an image signal
3 inputted to said sub solid image element and said main solid
4 image element is color signal processed to provide a color moving
5 image and data of said color moving image are used to perform
6 autofocus process, simplified image display process, photometry
7 control process, and white balance process.
- 1 3. The digital still camera according to claim 2, comprising
2 a simplified image display portion for displaying said color
3 moving image subjected to simplified image display process by
4 said digital image signal process circuit in order to preview
5 display an image to be photographed before photographing.
- 1 4. The digital still camera according to claim 2, comprising
2 a simplified image display portion in which the preview display
3 before photographing is terminated before the photographing is
4 started by said main solid image element so as not to display
5 said color moving image, and after completion of the
6 photographing by said main solid image element, the photographed

7 image photographed by said main solid element is displayed.

1 5. The digital still camera according to claim 4, wherein the
2 photographed image photographed by said main solid image element
3 is an image compress-processed after photographing.

1 6. The digital still camera according to claim 1, comprising
2 a digital image signal process circuit which calculates a signal
3 process coefficient in the white balance process, and uses said
4 signal process coefficient for processing the photographed image
5 obtained by photographing by means of said main solid image
6 element.

1 7. The digital still camera according to claim 1, comprising
2 a digital image signal process circuit which determines
3 photometry data including an aperture value and shutter speed
4 in the photometry control process before photographing by said
5 main solid image element, and performs photometry control based
6 on said photometry data.

1 8. The digital still camera according to claim 1, comprising
2 a digital image signal process circuit which determines an amount
3 of strobe light at strobe photographing by the dimmer process
4 function before photographing by said main solid image element.

1 9. The digital still camera according to claim 8, comprising
2 a dimmer sensor for measuring said amount of strobe light.

1 10. The digital still camera according to claim 8, wherein said
2 amount of strobe light is measured through said sub solid image
3 element.

1 11. The digital still camera according to claim 1, comprising
2 an optical path change mechanism which changes or distributes
3 the optical path of a light from a subject, and irradiates the
4 light from the subject onto at least one of said main solid image
5 element and said sub solid image element.

1 12. The digital still camera according to claim 1, comprising
2 an optical path change mechanism in which when the optical path
3 of a light from a subject is changed or distributed and the light
4 from the subject is irradiated onto any one of said main solid
5 image element and said sub solid image element, the light from
6 said subject is shielded on the other.

1 13. The digital still camera according to claim 1, comprising
2 said main solid image element and said sub solid image element
3 in which when one of them is operated, the other is not operated.

1 14. The digital still camera according to claim 11, comprising
2 a light control logic circuit for controlling said optical
3 mechanism, a main image analog process circuit and a sub image
4 analog process circuit for receiving and processing the
5 respective output signals of said main solid image element and

6 said sub solid image element, an analog process control logic
7 circuit for controlling said main image analog process circuit
8 and said sub image analog process circuit, and a digital image
9 signal process circuit for receiving and color processing the
10 digital output signal from said main image analog process circuit
11 and said sub image analog process circuit, said light control
12 logic circuit and said digital image signal process circuit being
13 interconnected.

1 15. The digital still camera according to claim 14, comprising,
2 in addition to said light control logic circuit, said main image
3 analog process circuit, said sub image analog process circuit,
4 said analog process control logic circuit, and said digital image
5 signal process circuit, a sub CPU for controlling said light
6 control logic circuit and said analog process control logic
7 circuit through a sub digital bus, and a main CPU for controlling
8 said digital image signal process circuit through a main digital
9 bus.

1 16. The digital still camera according to claim 14, wherein said
2 light control logic circuit and said digital image signal process
3 circuit are interconnected by a two-way digital bus provided
4 therebetween.

1 17. The digital still camera according to claim 14, wherein said
2 light control logic circuit and said digital image signal process
3 circuit are interconnected via said main digital bus.

1 18. The digital still camera according to claim 14, wherein any
2 one of said main image analog process circuit and said sub image
3 analog process circuit includes a switch and an analog-digital
4 converting circuit, said switch selects any one of the output
5 signals from said main solid image element and said sub solid
6 image element, and thereafter, the output signal selected is
7 converted by said analog-digital converting circuit.

1 19. The digital still camera according to claim 1, wherein said
2 sub solid image element is a solid image element other than a
3 full frame type solid image element.

1 20. The digital still camera according to claim 19, wherein said
2 sub solid image element is an interline type solid image element.

1 21. The digital still camera according to claim 19, wherein said
2 sub solid image element is a CMOS type solid image element.